

**Vermont Department of Environmental Conservation**

Watershed Management Division

Barre Regional Office

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Agency of Natural Resources

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**AUTHORIZATION TO CONDUCT STREAM ALTERATION ACTIVITIES**

Pursuant to Section C.2.2 of the VT Stream Alteration General Permit (Reporting activities not requiring an application)

Project Number: SA-03- 119 -2015Applicant Name: TOWN OF HOLLANDMailing Address: 120 SCHOOL ST. HOLLAND VT Phone:   Project Location TH4 - 0.4 mi South of the intersection  
w/ TH9 & TH18 Email: b.wiesen@nayfairpoint.net

The Secretary of the Vermont Agency of Natural Resources (VT ANR) has determined that:

1. This project authorizes the replacement of an existing 4'Ø culvert with a new 12' x 7' RCB with 2' of embankment, infilled using EZ material.
2. The proposed activity is eligible for coverage under the VT ANR Stream Alteration General Permit.
3. The proposed activity will meet the terms and conditions of the General Permit provided:
  - a) The project will be completed and approved as shown on the plan dated 5-7-15, prepared by VTrans District 9, and approved by the Vermont Agency of Natural Resources.
  - b) The project will not adversely affect the public safety by increasing flood hazards.
  - c) The project will not significantly damage fish life or wildlife.
  - d) The project will not significantly damage the rights of riparian owners.
  - e) The project will not obstruct the movement of aquatic life indigenous to the waterbody beyond the actual duration of construction.
  - f) The project is conducted in a manner which minimizes or avoids any discharge of sediment or other pollutants to surface waters in violation of the VT Water Quality Standards.
  - g) The ANR River Management Engineer is notified by phone or email when construction begins and when the project is complete.
  - h) A final construction inspection is required for all culvert and bridge projects.
  - i) In-stream working dates are from June 1<sup>st</sup> through October 1<sup>st</sup>; any in-stream work outside these dates will require an Individual Stream Alteration Permit authorization by the River Management Engineer.
  - j) This authorization has been posted for three days public comment. This authorization constitutes final approval.
  - k) Additional Conditions for this project: I) E&SC Plan required.

II) Water bypass plan required.

If there are any changes in the project plan or deviation in construction from the plan, the Permittee must notify the River Management Engineer immediately.

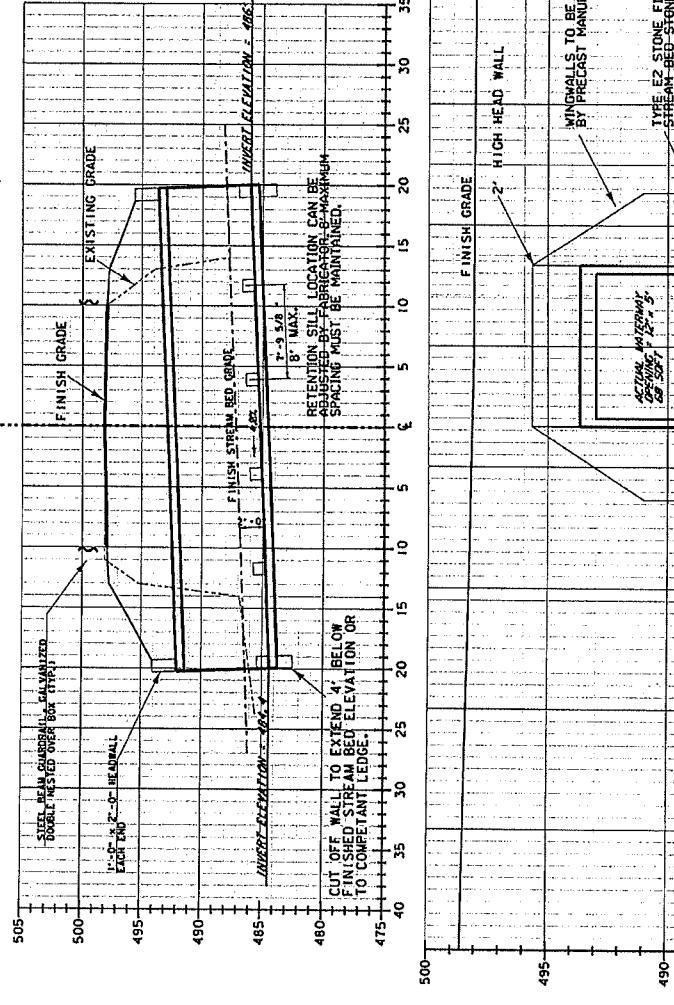
If the project is constructed as you have described, as shown on the above referenced approved plans and according to the above conditions, there is no reason to expect any violation of Vermont Water Quality Standards.

David K. Mears, Commissioner

Department of Environmental Conservation

by: Patrick J. Ross, P.E. dated: 5-12-15  
Patrick Ross, P.E., River Management Engineer

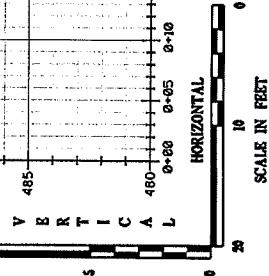
## HOLLAND ROAD



ONLY WALL FOOTINGS ARE FOR SCHEMATIC PURPOSES  
BY THE PRECAST MANUFACTURER TO DETERMINE  
EXTEND A MINIMUM OF 4' BELOW THE STREAM BED

CUTOFF WALL CAN BE CAST AS  
A HOLE WITH THE WIGHNACUMA MINIMUM  
FOOTING JUST EXTERIOR TO THE STREAM BED  
OF 4' BELOW STREAM BED

10' 0" 10' 0" 10' 0" 10' 0" 10' 0" 10' 0" 10' 0" 10' 0" 10' 0" 10' 0"



SCALE IN FEET

## CULVERT SECTION @ INLET

PLANS PREPARED BY:		PROJECT:		PROJECT MANAGER: S. MORIN DESIGNED BY: J. SEVIGNY DRAWN BY: J. SEVIGNY CHECKED BY: S. MORIN PLOT DATE: 5/7/15 SHEET 1 OF 1									
 DISTRICT #9		TOWN HIGHWAY MUNICIPAL GRANT PROGRAM REPLACEMENT OF AN EXISTING 4' CULVERT WITH A PROPOSED 10' X 7' X 40' CONCRETE BOX CULVERT BURIED 2' BELOW STREAM BED											

## GENERAL NOTES

1. INFORMATION FOR THIS PLAN WAS DEVELOPED FROM A ROAD SURVEY AND TOPOGRAPHIC SURVEY AS OF COMPLETED AT THIS SITE.
2. THIS PROJECT SHOULD BE CONDUCTED IN A MANNER WHICH MINIMIZES OR AVOIDS ANY DISCHARGE OF SEDIMENT OR OTHER POLLUTANTS TO SURFACE WATERS.
3. A PRE-CONSTRUCTION MEETING SHALL BE HELD BETWEEN THE RIVER MANAGEMENT ENGINEER AND THE CONTRACTOR STAFF AND THE ARR RIVER MANAGEMENT DISTRICT'S STAFF.
4. THE RIVER MANAGEMENT ENGINEER SHALL BE NOTIFIED WHEN CONSTRUCTION BEGINS AND WHEN THE PROJECT IS COMPLETE.

5. IN STREAM WORKING DATES FOR ALL GENERAL PERMIT ACTIVITIES SHALL BE ONE DAY LONG. NO WORK SHALL BE CONDUCTED ON THE STREAM A PERMIT AUTHORIZED BY THE RIVER MANAGEMENT ENGINEER (PATRICK ROSS).
6. CONTRACTOR SHALL SUBMIT PRECAST BOX SHOP DRAWINGS TO THE TOWN AND DISTRICT'S STAFF FOR REVIEW AND APPROVAL.

## CONSTRUCTION NOTES

- THE PROPOSED BOD CULVERT IS A 12' X 7' X 40' PRECAST CONCRETE BOX CULVERT BURIED 2' BELOW THE FINISHED STREAM BED ELEVATION. ACTUAL STREAM BED ELEVATION IS 12' X 3' 6" BELOW G.O. MARK.
- STRUCTURE SHALL BE PLATED, MINIMALS AT THE INLET AND OUTLET SHALL MATCH THE EXISTING STREAM BED ELEVATION. MINIMALS MAY BE CAST IN PLACE OR PRECAST WITH LENGTHS DETERMINED IN THE FIELD. FLOORING SIZE TO BE DETERMINED BY FABRICATOR.
- STRUCTURE TO HAVE CUT OFF WALLS AT THE INLET AND OUTLET, AND SHALL EXTEND A MINIMUM OF 4' BELOW THE STREAM BED ELEVATION.
- STONE FILM TYPE II SHALL BE USED TO STABILIZE ANY DISTURBED STREAM BANKS AT THE INLET AND OUTLET OF THE OPENING, AND BACKFILL SHALL EXTEND A MINIMUM OF 1' ABOVE THE TOP OF OPENING.
- THE BODY CULVERT SHALL BE PRECAST IN THE MINIMALS AND HEADWALLS, AND PLATED ON THE OUTSIDE OF THE STRUCTURE. THE BODY CULVERT SHALL BE PRECAST IN THE MINIMALS AND HEADWALLS, AND PLATED ON THE OUTSIDE OF THE STRUCTURE. THE BODY CULVERT SHALL BE PRECAST IN THE MINIMALS AND HEADWALLS, AND PLATED ON THE OUTSIDE OF THE STRUCTURE. THE BODY CULVERT SHALL BE PRECAST IN THE MINIMALS AND HEADWALLS, AND PLATED ON THE OUTSIDE OF THE STRUCTURE.
- STRUCTURE AND ALL ASSOCIATED CONSTRUCTION SHALL CONFORM TO THE STATE OF HIGHWAY AND BRIDGE CONSTRUCTION STANDARDS AND SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION.
- THE BODY CULVERT SHALL BE PRECAST IN THE MINIMALS AND HEADWALLS, AND PLATED ON THE OUTSIDE OF THE STRUCTURE. THE BODY CULVERT SHALL BE PRECAST IN THE MINIMALS AND HEADWALLS, AND PLATED ON THE OUTSIDE OF THE STRUCTURE.
- ALL BODY CULVERT JOINTS SHALL BE STRENGTHENED WITH TURNBUCK COUPLINGS IN ACCORDANCE WITH SUBSECTION 501.5 OF THE STANDARD SPECIFICATIONS.
- AFTER BODY CULVERT SETTING, THE BODY CULVERT SHALL BE SET IN THE FINISHED POSITION, AND ALL BODY CULVERT JOINTS AND ALL LIFTING HOLES SHALL BE FILLED WITH MORTAR. TYPE I, II, OR III MORTAR SHALL BE USED. A MINIMUM OF 12 POUNDS OF MORTAR PER CUBIC FOOT SHALL BE USED. TYPE I, II, OR III MORTAR IS RECOMMENDED. TYPE IV MORTAR IS NOT RECOMMENDED. ANY SIMILAR COMPOUND MAY BE USED. ON INTERIOR SURFACES, THE BODY CULVERT SHALL BE PRECAST IN THE MINIMALS AND HEADWALLS, AND PLATED ON THE OUTSIDE OF THE STRUCTURE.
- STREAMBED FILL SPECIFICATIONS: STREAMBED FILL SHALL BE METALIC SHEETING, ANGULAR ROCK, OTHER STREAMBED MATERIAL, AND A MIXTURE OF ANGULAR MATERIAL AND RIVER SEDIMENT. THE STREAMBED FILL SHALL BE PLACED IN LAYERS, AND EACH LAYER SHALL HAVE A LEAST DIMENSION OF 18", AND AT LEAST 2' MILL CRUSHED MATERIAL. HAVE A MAXIMUM DIMENSION OF 2" AND BE APPROVED.
- THE STREAMBED FILL SHALL BE HARD BLASTED ANGULAR ROCK, OTHER STREAMBED MATERIAL, AND A MIXTURE OF ANGULAR MATERIAL AND RIVER SEDIMENT. THE STREAMBED FILL SHALL BE PLACED IN LAYERS, AND EACH LAYER SHALL HAVE A LEAST DIMENSION OF 18", AND AT LEAST 2' MILL CRUSHED MATERIAL. HAVE A MAXIMUM DIMENSION OF 2" AND BE APPROVED.
- TRAFFIC CONTROL: THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR ONE LANE CLOSURE PER THE LATEST VERSION OF THE MOU.
- THE CONTRACTOR IS ADVISED TO EXERCISE CAUTION WHILE WORKING IN AREAS OF THE STREAMBED. CONTRACTOR SHALL FOLLOW THE ALL DIG SITE REQUIREMENTS AS APPLICABLE.

Location : 0.4 miles South of Lyon Rd on Holland Road